Extron® Electronics
INTERFACING, SWITCHING AND CONTROL

USB Extenders • Setup Guide

This guide provides basic instructions for an experienced technician to install and operate the Extron USB Extenders.

The USB Extender Series includes the USB Extender Tx/Rx, AAP Tx/Rx, and Decora® Tx/Rx. They are USB transmitter and receiver pairs that extend the usable distance of USB 1.0, 1.1, and 2.0 standards with data transfer rates up to 480 Mbp and data transmission up to 450 ft (135 m) with standard Category 5/5e/6/6e/7 cable.
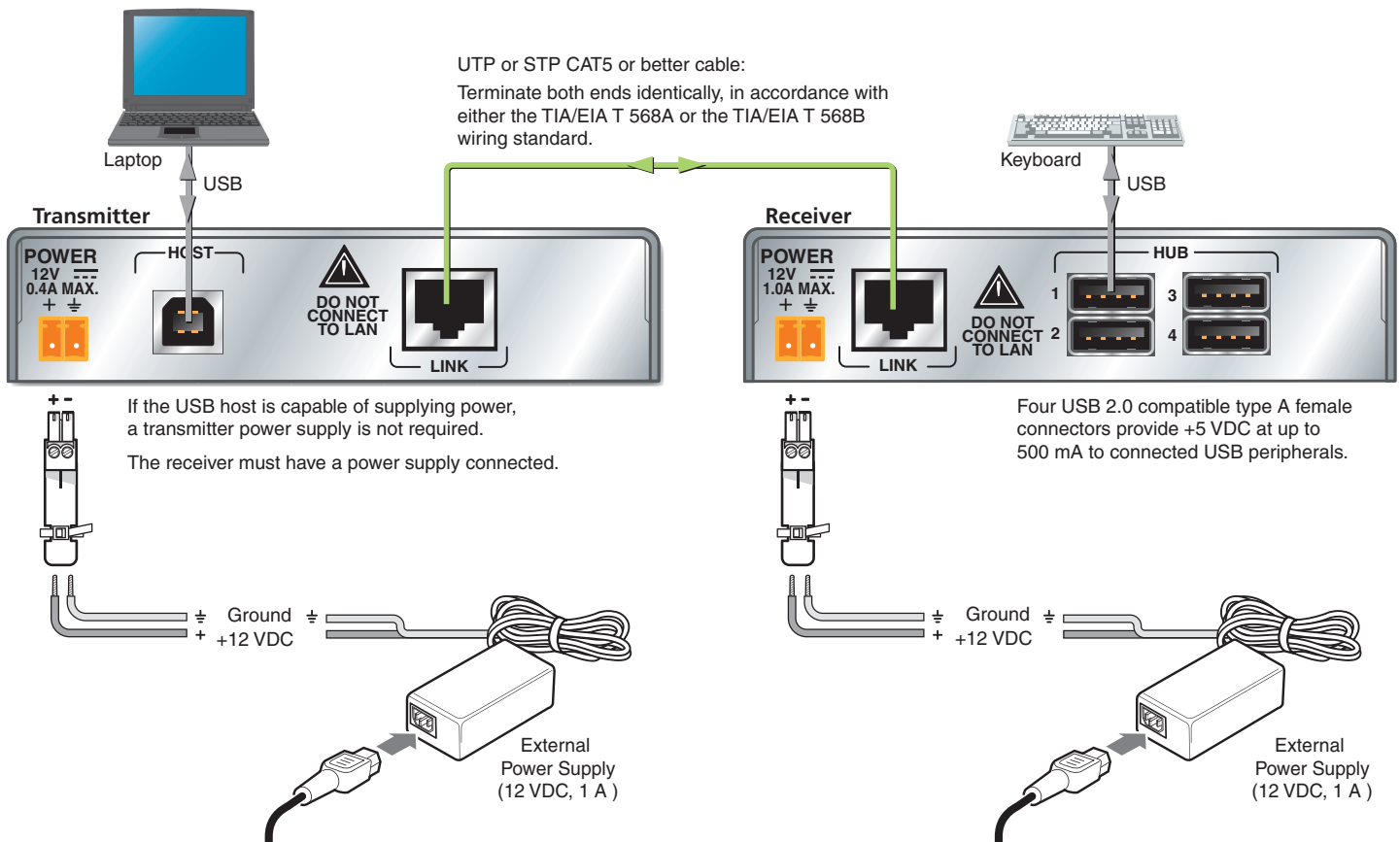
The rack mountable Tx/Rx, AAP mountable Tx/Rx, and Decora Tx/Rx models can be mixed.

Mount the USB Extenders

The USB Extender series includes transmitters and receivers in three form factors to provide a variety of mounting options including:

- USB Extender Tx/Rx in quarter rack width, 3 inch deep, 1 inch high metal enclosures
- USB Extender AAP Tx/Rx for double-space Architectural Adapter Plate openings
- USB Extender D (Decora) Tx/Rx for one-gang wall box or mud ring mounting

Choose the appropriate mounting location and install the USB Extender transmitter and receiver following instructions supplied with the mounting kit. If the rear panel connectors will be covered after mounting, make all connections prior to permanently mounting a USB Extender.

Laptop — USB — **Transmitter**

UTP or STP CAT5 or better cable:
Terminate both ends identically, in accordance with either the TIA/EIA T 568A or the TIA/EIA T 568B wiring standard.

Keyboard — USB — **Receiver**

POWER 12V 0.4A MAX. + ⏚ — HOST — DO NOT CONNECT TO LAN — LINK

POWER 12V 1.0A MAX. + ⏚ — DO NOT CONNECT TO LAN — LINK — HUB 1 2 3 4

If the USB host is capable of supplying power, a transmitter power supply is not required.

The receiver must have a power supply connected.

Four USB 2.0 compatible type A female connectors provide +5 VDC at up to 500 mA to connected USB peripherals.

Ground ⏚ + +12 VDC — External Power Supply (12 VDC, 1 A)

Ground ⏚ + +12 VDC — External Power Supply (12 VDC, 1 A)

Run All Cables

Connect the transmitter and receiver as shown above.

> **NOTE:** The host and hub connectors of the AAP and Decora models are on the front panel. The host connection on the AAP and Decora transmitter is a female mini USB Type B. Connection and operation are the same as the rack mount Tx/Rx models.
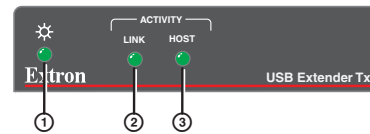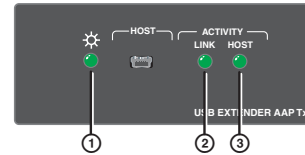
Apply Power to the USB Extenders

1. Connect the external power supply to the receiver.
   The power LED (①) on the receiver lights when power is applied.

2. Connect power to the transmitter depending upon the power source.

   - If using an external supply the power LED (①) of the transmitter lights when power is properly applied. The Link LED (②) on both the transmitter and receiver also lights to indicate proper link cable connection, or

   - If using a computer USB port to power the transmitter, the transmitter Power and Link LEDs do not light until after the laptop or PC is powered and booted up. The receiver Link LED lights once the transmitter is powered.

Connect the Host (Transmitter)

1. Connect a USB cable from the PC or laptop USB port to the transmitter Host port as shown on the previous page. The AAP and Decora transmitters have a female mini USB Type B connector on the front panel for this connection.

2. Reboot or power up the PC or laptop. The Host LED on the front panel of the transmitter (③) lights when the PC recognizes the port. If the PC is supplying transmitter power, the transmitter and receiver Link LEDs (②) both light.
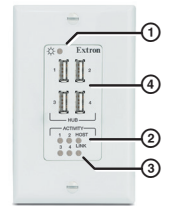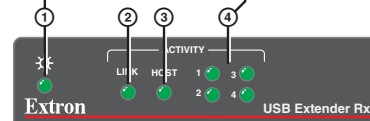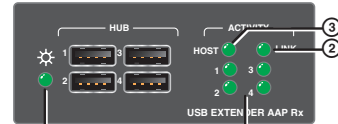
Transmitters

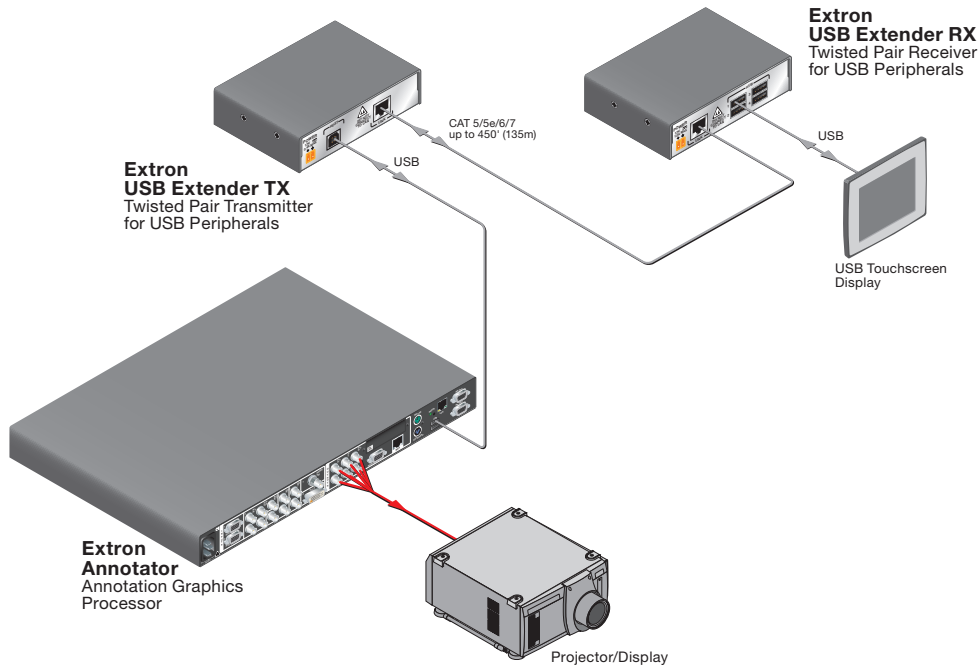USB Extender Tx D

Connect the Hub (Receiver)

1. Connect up to four USB cables from peripheral devices to the receiver Hub ports. The order of connection does not matter.

   The Host LED on the receiver (③) lights as communications between the USB transmitter and host occur.

2. As each peripheral is connected, the LED for the appropriate hub port (④) lights when the PC has detected the device.

Receivers

USB Extender Rx D

> **NOTE:** The USB Extender receivers can supply up to 0.5 A to each connected peripheral.

Extron USB Extender RX
Twisted Pair Receiver for USB Peripherals

Extron USB Extender TX
Twisted Pair Transmitter for USB Peripherals

CAT 5/5e/6/7 up to 450' (135m)

USB

USB Touchscreen Display

Extron Annotator
Annotation Graphics Processor

Projector/Display